

What is claimed:

1. An automatic dispenser for dispensing liquid stored in a container, the dispenser comprising:
  - a housing;
  - a reservoir disposed in said housing;
  - a pump having a pump chamber, said pump for drawing liquid from an associated container;
  - an intake tube in fluid communication with the pump chamber, said intake tube adapted to be disposed in the associated container;
  - an exhaust tube in fluid communication with the pump chamber and said reservoir; and
  - a spigot for selectively discharging liquid from said reservoir.
2. The automatic dispenser of claim 1, wherein the dispenser has a height such that when the dispenser is mounted on the associated container the dispenser extends above the associated container about equal to or less than the height that a standard cap for the associated container would extend above the container.
3. The automatic dispenser of claim 1, wherein said housing has a width that is less than or equal to the width of a conventional laundry detergent bottle.
4. The automatic dispenser of claim 3, wherein said housing has a length that is less than or equal to the length of a conventional laundry detergent bottle.
5. The automatic dispenser of claim 1, wherein said reservoir is dimensioned to hold about one laundry load's worth of liquid.
6. The automatic dispenser of claim 1, wherein said reservoir includes a chamber dimensioned to hold about one-half of one load's worth of laundry detergent.

7. The automatic dispenser of claim 1, wherein said reservoir is dimensioned to hold about 5 fluid ounces to about 7 fluid ounces of liquid.
8. The automatic dispenser of claim 1, wherein said reservoir is under pressure.
9. The automatic dispenser of claim 8, further comprising a piston disposed in said reservoir.
10. The automatic dispenser of claim 9, further comprising a spring biasing said piston.
11. The automatic dispenser of claim 10, further comprising a switch disposed in said reservoir.
12. The automatic dispenser of claim 11, wherein said switch is activated by said piston and communicates with said motor.
13. The automatic dispenser of claim 1, wherein said reservoir is adapted to empty under gravity flow.
14. The automatic dispenser of claim 1, wherein said reservoir includes at least two chambers.
15. The automatic dispenser of claim 1, wherein said pump is adapted to pump liquid from the associated bottle to said reservoir such that it takes several minutes to fill said reservoir.
16. The automatic dispenser of claim 1, wherein said pump is adapted to pump liquid from the associated bottle to said reservoir at a pumping rate and the reservoir is adapted to dispense liquid from the reservoir at a dispensing rate, wherein the pumping rate is less than the dispensing rate.

17. The automatic dispenser of claim 16, wherein the pumping rate is such that said reservoir fills with liquid in less than the time of a laundry cycle of a conventional washing machine.
18. The automatic dispenser of claim 1, further comprising an internal shut-off mechanism to stop the flow of liquid between the pump chamber and said reservoir.
19. The automatic dispenser of claim 1, further comprising a motor operatively connected to said pump.
20. The automatic dispenser of claim 19, wherein said internal shut-off includes a motor current monitor.
21. The automatic dispenser of claim 20, wherein the current monitor measures a difference in current drawn by said motor between when said pump is filled with liquid and when said pump has no liquid.
22. The automatic dispenser of claim 20, wherein the current monitor measures current drawn by said motor over a plurality of consecutive armature revolutions.
23. The automatic dispenser of claim 1, further comprising a means for determining whether the associated container contains liquid.
24. The automatic dispenser of claim 1, further comprising a motor operatively connected to said pump.
25. The automatic dispenser of claim 24, wherein said motor engages said pump through a speed reducing transmission.
26. The automatic dispenser of claim 25, wherein the transmission is adapted to translate rotational movement of said motor to reciprocal movement.

27. The automatic dispenser of claim 1, wherein the diameter of said intake tube is less than the diameter of the spigot.
28. The automatic dispenser of claim 1, further comprising a cup holder mounted to said housing, said cup holder adapted to receive a cap from the associated container.
29. The automatic dispenser of claim 28, wherein the cup holder includes a member defining a notch between said housing and the member, the notch being adapted to receive a flange of the cap from the associated container.
30. The automatic dispenser of claim 28, further comprising a plate for at least partially covering the cap from the associated container.
31. The automatic dispenser of claim 30, wherein the plate is spring loaded.
32. The automatic dispenser of claim 30, wherein the plate includes an opening aligned with said spigot.
33. The automatic dispenser of claim 32, wherein the plate includes a collar surrounding the opening in the plate.
34. The automatic dispenser of claim 33, wherein the collar slopes away from the spigot.
35. The automatic dispenser of claim 33, wherein the collar includes a rolled end depending downwardly from around the opening.
36. The automatic dispenser of claim 1, further comprising a check valve disposed in said intake tube proximal an end of said tube opposite the pump chamber.

37. The automatic dispenser of claim 1, further comprising a neck attached to said housing and adapted to mount to the associated container.
38. The automatic dispenser of claim 37, wherein said neck is adapted to fit over different sized openings of associated containers.
39. The automatic dispenser of claim 37, further comprising a lock ring at least substantially surrounding said neck.
40. The automatic dispenser of claim 1, further comprising an indicator for indicating when the associated bottle is depleted of liquid.
41. The automatic dispenser of claim 40, wherein said indicator comprises an LED.
42. An automatic dispenser for dispensing liquid stored in a container, the dispenser comprising:  
a housing;  
a reservoir disposed in said housing;  
a pump in communication with said reservoir;  
an intake tube in fluid communication with said reservoir and adapted to be disposed in an associated container; and  
a spigot in communication with said reservoir for selectively dispensing liquid from said reservoir.
43. The dispenser of claim 42, wherein said reservoir is dimensioned to store at least one laundry load's worth of liquid detergent.
44. The dispenser of claim 42, wherein said pump is adapted to pump liquid from the associated container at a pumping rate and said spigot is adapted to selectively dispense liquid

from said reservoir at a dispensing rate, wherein the dispensing rate is greater than the pumping rate.